# THE REVALUTION OF MARCHITTI`S CONSTANT FOR EFFICIENTLY TRANSPORT COMUTTING IN WORLD.

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**Annotation:** *Marchetti`s Constant will has brought significantly chance for urban planning and transport over World whean we should show the blue print of commuting that although forms of modern transport may change in countries such as South Korean, Russen, Uzbekistan and others countriess, people gradually adjust their lives to their lives to their conditions ( including location of their homes relative to their workplace) such that the average travel time stays approximately constant. In attracting significant research attention by home-work commuting on people mobility. Point of the key advertisemet in this domain of study is the universal uniformity of commute time. Moreover, Zahavi approach this problem although the use of mobility phone call detail records (CDRs). Finally, he put forth a testable hypothesis and suggest ways for future work to make more accurate and* generalizable statements about human commute behaviors.

**Keywords:** *Marchetti`s Constant, CDRs, urban planning, transport, travel time, commuting, home-work, location, distance, employement.*

*Jet Propulsion Laboratory-must now find another launch vehicle. It will be lucky if it arrives at Jupiter merely seven years behind schedule.*
*I have decided not to wait.*
*Colombo, Sri Lanka,*
*April 1987*

Marchetti`s Constant is a proven principle of urban design that shovs the average time a person spends commuting each day, an approximate total of one hour, That`s thirty minutes to work and thirty minutes back home. The fascinating things is that this principle has been historically proven time and again. Regardsless of the mode of transportation, people consistently take 30 minutes to travel to work. Whether they were walking, riding on horseback, taking a buggy, driving a car or riding on the latest bullet train, it`s always 30 minutes. For urban planners, this pettern has huge implications as it drives population density in urban and suburban areas because people are unlikely to move beyond a fixed radius of distance from their place of employement.

The majority of University in our country are deeply impacted by car travel. It`s one of those facts of daily life that is so obvious for most of us that we don`t think about it. There was a time when most people walked to our Tashkent, but that norm changed as the car became more widespread. This reality is important for us to remember as our campus are insignificantly affected by both the communities we serve as well as their transportation choise.

Campus districts around the country are also built around the Marchetti Constant. The majority of high school students who walk to campus are within a two mile range of their University  this average student takes 30 minutes to walk to campus. Marchetty strikes againe. It`s also true that there has been an increase over time of high school students driving to campus, but what has also happened is an increase in teens picking up their friends on the way to campus.

Uzbekmen need to become more local in what we do. Unless you are willing to set up some sort of driving system to pick up every student, it can be difficult to get student to attend your progrems unless they are within two miles of your location. If this window shrinks, it`s going to put even more pressure on our churches to think more local and less regional. It`s unlikely to collapse quickly because of the persistence of Marchetti`s Constant. (It is a constant after all!) But truly, we need to keep an eye on this trend. Our ministry models are tied to the  transportation that people take to get to use, and if that shifts it will have an impact on what we do.

If driverless cars become a thing and the speed limits on our highways jump by 50% because autonomous cars outperform human ability, we will see people from further distance come to house.

Forexemple, Zahavi propose the use of mobile phone signaling data to minimize these possible confounding factors. While there is no guarantee thet individuals across all countries/cultruies share the same call patterns, these cellphone datasets still contain some"common denominators" from which mobility behaviors have been inferred in previous studies. He attempt to support/refute the constant travel time budget hypothesis. Investigating this hypothesis has important implications at the policy level, as it dictates how the population behaves new modes of transport, roads, or other infrastructure are built.

In this study, Zahavi focus on a specific type of commute known as home-work commuting. While the tern "commute" may be more broadly defined to include any repeated trip between two or more locations, most of the studies cited above explore commute in the specific context of that between home and work. We first describe a methodology for inferring the home-work locations and aggregate commute patterns from mobile phone calls in different countries/cities, in comparison with the car-only GPS traces from Milan. While it is generally not possible for commute times to be accurately measured using mobile phone calls alone, the timing of the last call from home and the first call from the workplace is used (only for users who make frequent call) as a proxy from which an individual`s morning commute time can be gauged, and vice versa, for the evening commute time. He then test the methodology by investigating some interesting commute patterns. He close this study by testing a specific version of the constant travel time budget hypothesis with respect to people`s commute behaviors. While this proxy for commute time, as defined above, generally results in an overestimation of the commute interval, he also describe approaches in wich the actual commute time can be more accurately estimated in future studies.

Once the home-work locations are identified, then we computed the commute distance as the grate circle distance between the home and work locations. There are many approaches in literature to estimate the commute distance path (SDP), or the shortest time path (STP). As CDR datasets are unable to exactly reproduce the routes of commute, unless coupled with GPS traces or further questionnaire information, he chose to calculate the crown-fly distance. Of the two approaches (great circle versus Eucliden distances), the former seems to be more accurate especially in cases where the commute distance. Depending on the modes of commute (e.g. bus, train, car, etc.), the correction factor between the actual commute distance and great circle distance may differ. In general, for a commute distance greater than 5km, this correction factors Is quite consistent at about 1,3-1,4 for different modes of transportation. However, below 5km, this factors can either increase drastically (for cars), or decrease (for public transport). Since the CDR datasets likely include mixed modes of commute, the scientist can at best say that the under-estimation for medium/long commutes (-5 km or more) will be consistent, which will improse a systematic correction factors on our graet-circle commute distance. For shorter commute (i.e.<2.5 km), this error may become significant and dependent on mode of transport, and this may limit his ability to take accurate commute distance measurements at short distances. However, with the lack of data on other details aboute individuals commute, here, he simply take the great circle distance as a proxy for the commute distance, which will be always greater than the great circle distance.

Overally, in this paper, we developed a methodology that allows us to interrogate human commute behaviors, and applied it to several mobile phone and GPS datasets. The fact that the scientist were observe common commute features despite the highly diverse nature of these detests offer a compelling demonstration that are some aspects of human commuting that are universal, and he consider this to be a novel development of the use of mobily phone detesets to better understand commute behavior

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